Glucose Alerting System

Client: Olive Cernigila

Advisor: Dr. John Puccinelli

Team:

Isabel Ploessl - Co-Team Leader Claudia Beckwith - Co-Team Leader Lauren Klein - BSAC Ella Prose - BPAG Audrey Zeller - BWIG Kiera Klemm - Communicator

Date: 09/11/2025

Problem Statement:

A) To make blood glucose status clearly visible, understandable, and actionable for anyone supervising a young child with diabetes

And / or

B) Modify a Continuous Glucose Monitoring device for a child's active body, which reduces discomfort and improves wearability

Brief Status Update: Held the first initial meeting with the client to introduce ourselves and communicate ideals and needs while moving into the infancy of our semester working together! The team has started preliminary research on Diabetes, CGM's, pumps, and other treatments for this disease. First meeting with advisor on Friday 9/12.

Summary of Weekly Team Member Design Accomplishments:

- Team:
 - O Client meeting on 9/8

Name	Activity	Time	Week
		(hr)	Total (hr)

Isabel Ploessl	 Attended Project Selection Preliminary Research Client meeting Client questions Notebook setup Initial progress report setup 	2 hrs 1 hr .5 hr .5 hr 2 hr	6 hr
Claudia Beckwith	 Attended Project Selection Client questions and meeting Research top CGM devices on the market and current tracking systems 	2 hrs 1 hr 1 hr	4 hr
Lauren Klein	 Attended Project Selection Researched Type 1 Diabetes in pediatric patients Researched Current CGM models (Dexcom, etc) Created Microsoft Teams for document organization 	2 hrs 1 hr 1 hr	5 hrs
Ella Prose	 Preliminary Research on Type 1 Diabetes Client Questions Researched differences between CGM brands 	1 hr .5 hr .5 hr	2 hr
Audrey Zeller	 Attended Project Selection Researched Type 1 Diabetes in pediatric patients Updated Website with team picture and preliminary info Researched questions to ask client 	2 hrs .5 hr .5 hr	3 ½ hr

Kiera Klemm	 Attended Project Selection Made initial contact with client Scheduled Client Meeting and arranged video call/questions 	2 hr .5 hr .5 hr	4 hr
	call/questionsClient Meeting	1 hr	

Weekly/Ongoing Difficulties:

• No difficulties at the moment

Upcoming Team and Individual Goals:

- Team:
 - o Decide on which area of the proposed project to pursue
 - o Brainstorm Ideas for Prototyping
 - Attend Advisor and Client Meetings
- Isabel Ploessl:
 - Write new problem statement
 - o Draft PDS Document
 - o Begin entering research into Lab Archives
- Claudia Beckwith:
 - Work on PDS
 - o Research current tracking methods corresponding to leading CGM devices
 - Update LabArchives
- Lauren Klein:
 - o Attend BSAC Meeting on 09/12
 - o Continue research to get a better understanding of competing designs
 - o Inquire about prototyping
 - Work on PDS
- Ella Prose:
 - Work on draft of PDS
 - o Continue research on the specific design attributes
 - o Keep track of costs and update them
- Audrey Zeller:

- o Update website with new progress reports
- o Fill in any information needed to go on the website
- o Upload any necessary documents to canvas, website, ect
- o Continue research to get a better understanding of possible designs

• Kiera Klemm:

- o Continue researching existing devices for bracelets and CGMs
- o Communicate with client about PDS specifications
- o Work on PDS and update Lab Archives

Project Timeline:

Project Goal	Deadl in e	Team Assigned	Pro gr ess	Comp let ed
Client Meeting	9/8	ALL	10 0%	Yes
Weekly Progress Report	9/11	ALL	100 %	Yes
PDS	9/18	ALL		
Design Matrix	9/27	ALL		
Preliminary Presentations	10/3	ALL		
Preliminary Deliverables	10/8	ALL		
Show and Tell	10/31	ALL		
Poster Presentations	12/5	ALL		
Final Deliverables	12/10	ALL		

Expenses:

Item	Description	Manufactur er	Part Numb er	D a	Q T Y	Co st	T o t	L
------	-------------	------------------	--------------------	--------	-------------	----------	-------------	---

		t e	E	la h	a l	n k
No purcl	hases scheduled so far					
TOTA					\$0.0	0
L:						